

An equivariant Quillen theorem

A classical theorem due to Quillen (1969) identifies the unitary bordism ring with the Lazard ring, which classifies the universal one-dimensional commutative formal group law. We prove an equivariant generalization of this result by identifying the homotopy theoretic $\mathbb{Z}/2$ -equivariant unitary bordism ring, introduced by tom Dieck (1970), with the $\mathbb{Z}/2$ -equivariant Lazard ring, introduced by Cole-Greenlees-Kriz (2000). Our proof combines a computation of the homotopy theoretic $\mathbb{Z}/2$ -equivariant unitary bordism ring due to Strickland (2001) with a detailed investigation of the $\mathbb{Z}/2$ -equivariant Lazard ring. This is joint work with Michael Wiemeler.